

Leisure Constraints, Leisure Constraints Negotiation and Recreation Specialization for Water-Based Tourism Participants in Busan

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Abstract

The purpose of this study was to identify the relationships among leisure constraints, leisure constraints negotiation, and recreation specialization for water-based tourism participants in Busan. Through this study, coastal cities of Korea (e.g., Busan) may attempt to develop marine leisure infrastructure. To achieve the goal of this study, 339 surveys were collected from male and female adults who planned to participate in water-based tourism event in 2017 were delineated as the study population. A convenient, non-random sampling method was used to select participants. After examining the correlation among leisure constraints, leisure constraints negotiation and recreation specialization, the relationships among the three variables was assessed through multiple linear regression analysis. The results of this study were as follows. First, regarding sub-factors of leisure constraints for water-based tourism participants, intrapersonal constraints, interpersonal constraints, and structural constraints had negative effects on leisure constraints negotiation. Second, the sub-factors of intrapersonal constraints and structural constraints had negative effect on recreation specialization, and interpersonal constraints were not statistically significant. Third, leisure constraints negotiation had a partially positive effect on recreation specialization.

Keywords: leisure constraints, leisure constraints negotiation, recreation specialization, water-based tourism participants, Busan

1. Introduction

In recent times, ever since the balance between work and leisure has been recognized as a key indicator of our quality of life, the importance of leisure activities has become significant issue. Many people have focused on leisure participation to increase their life satisfaction. Sports activities, which are most popular for leisure, have also undergone major changes in recent years. The forms of sports activities that were dominated by nature in the past are changing into ones that facilitate the enjoyment of nature, such as the seas, skies, mountains, rivers, and lakes (Nimrod, 2007). In addition, interest in leisure activities has turned from being passive, such as in watching TV, reading, and listening to music, to becoming active, such as in outdoor recreation, nature adventure, and various sports (Brymer & Gray, 2009). In this transition, water-based tourism has emerged as one of the most popular in terms of enabling harmony with nature and providing endless challenge to human nature (Jennings, 2007).

With regard to this, the tourism industry is considered to be the world's largest, and it is assessed as being the most effective way of creating employment (Wilson & Tisdell, 2003). In particular, water-based tourism, such as marine leisure sports, cruising, yachting, surfing, scuba diving, and fishing, can create high added value; thus, its significance has been emphasized. As an Asian peninsula and a diverse water-based tourism resource, Korea has natural tourist attractions more than 3,000 islands, approximately 12,000km of coastline, wide wetlands, and beautiful seascapes. Therefore, coastal cities of Korea (e.g., Busan) may attempt to develop water-based tourism. Particularly, the marine waterfront city of Busan's water-based tourism is the best in Korea, both in name and in reality, because it has many natural tourist attractions, natural resources, various water-based leisure sports events, and government support (Busan Development Institute, 2008). Water-based tourism, previously regarded

as a sport exclusively for the rich, has been popular and available to everyone by way of leisure activities. Even though water-based tourism is reported to be highly addictive, many researchers of water-based tourism addiction explain that it could be hard to understand addiction or commitment to water-based tourism as a negative behavior; instead, it should be understood as being a part of the process of specializing in recreation in a dynamic set of leisure activities on offer (Ditton, Holland, & Anderson, 2002; Thapa, Graefe, & Meyer, 2005).

Water-based tourism has more complex characteristics than do other forms of tourism because it requires specialized knowledge and skills, such as those in fishing, yachting, scuba diving, surfing, kite boarding, and jet skiing (Jennings, 2007). Therefore, participants invest much time in acquiring the skills and knowledge and to feel a high level of satisfaction. This phenomenon is explained in various terms, such as mania, leisure commitment, serious leisure, and recreation specialization (Oh & Ditton, 2008). It is defined as a process in which a person develops from being a general participant to becoming a special one with the aid of equipment, skills, and preferred places when enjoying certain leisure activities (Brayan, 1977). Water-based tourism is a recreational specialization that considers the acquisition and exhibition of diverse skills, experiences, and knowledge to be leisure activities (Gössling, 2006). In addition, studying water-based tourism participants' specialization in recreation is necessary in terms of the patience and effort required to acquire skills and equipment, depending on the place and time of enjoyment.

Despite the many psychological benefits of the recreation specialization process shown by previous studies, many leisure activity participants do not participate in water-based tourism because they feel various constraints to leisure in water-based tourism. A leisure constraints concept is defined as anything that inhibits leisure participation and leisure satisfaction (Jackson, 1993); however, Jackson et al. (1993) argue that leisure participation is determined by the process of negotiating leisure constraints rather than by the very existence of leisure constraints. Negotiating leisure constraints means undertaking various efforts to overcome leisure constraints, such as resistance to factors limiting leisure or participation in leisure activities by creating one's own conditions so as to participate continuously.

Alexandris et al. (2003) reported a negotiation strategy that serves as a mediator in the process of overcoming leisure constraints. In the constraint-effects-mitigation model tested by Hubbard and Mannell (2001), leisure constraints directly affected participation; however, these leisure constraints themselves can induce negotiation strategies to overcome them and eventually increase participation. Therefore, analyzing the effects of leisure constraints on leisure constraints and recreation specialization is necessary.

This study examines the relationships among leisure constraints, leisure constraints negotiation, and recreation specialization by water-based tourism participants. It demonstrates that they can induce participation in leisure activities. The specific research problem is as follows: First, how do water-based tourism participants' leisure constraints affect leisure constraints negotiation? Second, how do their leisure constraints influence recreational specialization? Third, how does their leisure constraints negotiation affect recreational specialization?

2. Literature Review

2.1 Leisure Constraints

A leisure constraint concept is defined as a restriction on one's behaviors in leisure activities that can be attributed to psychology and the environment (Jackson, 1993). Scholars of leisure research have paid considerable attention to leisure constraints since the 1980s (Crawford & Godbey, 1987). Meanwhile, the existing literature is a body of knowledge on leisure constraints and provides insights into the relationship between leisure constraints and leisure experiences. For instance, Jackson and Rucks (1995) reported leisure participation as being dependent on negotiation for the absence of constraints rather than on solely the absence of constraints. In other words, people may negotiate constraints and succeed in initiating or continuing leisure participation. Leisure constraints limit participation in the desired leisure activities (Crawford & Godbey, 1987; Crawford, Jackson, & Godbey, 1991; White, 2008). Crawford et al. (1991) developed a hierarchical model of intrapersonal, interpersonal, and structural constraints. Intrapersonal constraints lie within the individual, such as shyness, poor health, and the lack of skill. Interpersonal constraints pertain to social interactions such as conflicting schedules or family obligations of potential activity partners. Structural constraints are features of the external environment, such as inadequate facilities, time limitations, and the lack of low-cost options.

2.2 Leisure Constraints Negotiation

Jackson et al. (1993) elaborated on this hierarchical model, emphasizing the level of participation rather than participation versus nonparticipation. Jackson et al. (1993) also proposed possible relationships among constraints, negotiation, and motivation, which have informed ongoing research efforts on leisure participation

and negotiation strategies (Fendt & Wilson, 2012; Frederick & Shaw, 1995; Henderson al., 1995; Hubbard & Mannell, 2001; Jackson & Rucks, 1995). Understanding whether or not negotiation strategies help people to overcome constraints to participation has practical implications for the provision of leisure-based health promotion programs.

2.3 Recreation Specialization

Bryan (1977) initially defined the recreation specialization construct as a continuum of involvement in a recreation activity that is manifested through one’s behavior, skill, and knowledge and one’s level of commitment to an activity. Recreation specialization has garnered much attention as a way of segmenting recreationists into more homogenous subgroups to help managers provide a range of products and services. It has also been investigated as being a social phenomenon through which people express and define themselves by their leisure activities (Stebbins, 1982). Inherent in the definition of recreation specialization is the idea of progression, an underlying assumption of which is that it involves movement toward a desirable end state (Tsauro & Liang, 2008). Bryan (1977) suggested the theory of recreation specialization through participant observation and in-depth interviews of 263 fishermen. Then, he classified them into four types depending on the place preference, skill, and frequency of participation: occasional fishermen, generalist, technique specialist, and technique-setting specialist. Consequently, Bryan discovered that the preference of place, environment, fishing tackle, manners, and even attitude depended on those types. Bryan also suggested that the more time fishermen spend fishing, the higher the level of specialization they pursue. And they not only had value for fishing but also identification related to fishing. Bryan’s goal was to provide natural resource managers and researchers with a conceptual framework for understanding and investigating diversity among outdoor recreationists engaged in the same activity. The research model for relationships among leisure constraints, leisure constraints negotiation, and recreation specialization is depicted in Figure 1.

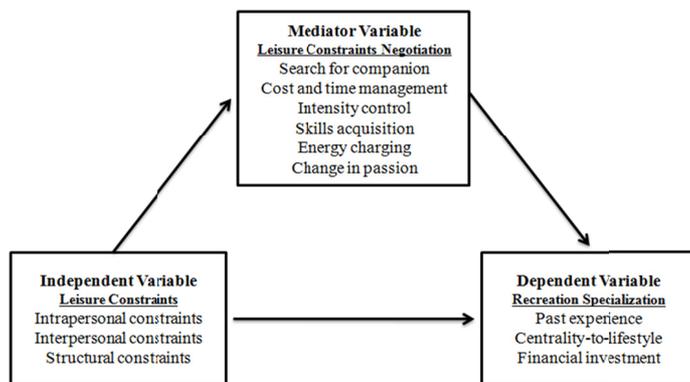


Figure 1. Model of the relationships among leisure constraints, leisure constraints negotiation, and recreation specialization

3. Materials and Method

3.1 Subject of the Study

To examine the relationships among leisure constraints, leisure constraints negotiation, and recreation specialization for water-based tourism participants in Busan, male and female adults who planned to participate in water-based tourism event in 2017 were delineated as the study population. A convenience, non-random sampling method was used to select participants. In total, 350 questionnaires were distributed, and of these, 11 were eliminated based on a lack of information, unfaithful answer, and etc. Thus, data in 339 questionnaires were analyzed.

3.2 Research Procedure

The primary research method adopted in this study was the questionnaire method (survey). Table 1 outlines characteristics of the questionnaire. Questionnaire items included 5 questions pertaining to demographic characteristics, 9 focusing on leisure constraints, 20 on leisure constraints negotiation, and 8 on recreation specialization. Leisure constraints variable is composed with intrapersonal constraints, interpersonal constraints, and structural constraints. 9 items assessed leisure constraints based on study by Crawford & Godbey (1987) was modified for this study. Leisure constraints negotiation variable composed with search for companion, cost and time management, intensity control, skill acquisition, energy charging, and change in passion. 19 items measure

developed by Lee & Scott (2009) based on the study of Loucks-Atkinson & Mannell (2007), with modification for the purpose of this study. Recreation specialization variable is composed with past experience, centrality-to-lifestyle, and financial investment. 8 items assessed recreation specialization based on study by McFarlane (1994) and Virden & Schreyer (1988) was translated and modified for this study. Questionnaires were measured on a five-point Likert scale ranging from ‘Strongly disagree’ (1) to ‘Strongly agree’ (5).

Table 1. Questionnaire characteristics

| Configuration Index | Content | Number of Questions | Total |
|---------------------------------|---------------------------|---------------------|-------|
| Demographic Characteristics | Gender | | |
| | Age | | |
| | Stay duration | 5 | 5 |
| | Information | | |
| | Experience | | |
| Leisure Constraints | Intrapersonal constraints | 3 | 9 |
| | Interpersonal constraints | 3 | |
| | Structural constraints | 3 | |
| Leisure Constraints Negotiation | Search for companion | 4 | 20 |
| | Cost and time management | 4 | |
| | Intensity control | 3 | |
| | Skill acquisition | 3 | |
| | Energy charging | 3 | |
| | Change in passion | 3 | |
| | Past experience | 3 | |
| Recreation Specialization | Centrality-to-lifestyle | 3 | 8 |
| | Financial investment | 2 | |
| | Total | | |

3.3 Validity and Reliability Tests

The validity and reliability of the study were verified through an expert discussion on the questionnaire items. To access the questionnaire’s content validity, 100 questionnaires were distributed. Of these, 5 were eliminated because of a lack of information; therefore, 95 were used in the preliminary research. Despite that the test value in this study was verified in earlier work, it was re-verified to ensure a better result.

Regarding construct validity and to verify questionnaire reliability, and exploratory factor analysis and reliability analysis were conducted. With principal factor analysis for factor extraction, the varimax rotation method was based on an eigenvalue of 1.0 or more, while selected items had factor values of .6 and more. To verify the reliability of the study, Cronbach’s α coefficient was used, and to determine if internal consistency was acceptable. Table 2, 3 and 4 provide the results of the exploratory factor analysis.

Table 2. Results of the validity test: leisure constraints

| | Intrapersonal | Interpersonal | Structural |
|---|---------------|---------------|-------------|
| I have lack of skill at enjoying water-based tourism | .891 | .163 | .216 |
| I felt uncomfortable enjoying water-based tourism | .867 | .118 | .133 |
| I have lack of desire to participate in water-based tourism | .857 | .188 | .173 |
| It is difficult for me to join together because I am far from my partner. | .067 | .885 | .071 |
| I do not have friends or family to participate in water-based tourism | .124 | .881 | .106 |
| I cannot participate in water-based tourism because of busy | .208 | .783 | .019 |
| Transportation is uncomfortable | .056 | .153 | .864 |
| I do not have enough time to participate in water-based tourism | .165 | .092 | .812 |
| Water-based tourism is overcrowded | .170 | .034 | .806 |
| Eigenvalue | 2.589 | 2.284 | 2.241 |
| % of Variance | 27.618 | 25.195 | 23.913 |
| Cumulative % | 27.618 | 52.813 | 76.726 |
| Cronbach’s α | .896 | .837 | .728 |

Table 3. Results of the validity test: leisure constraints negotiation

| | Search for companion | Cost / time management | Intensity control | Skill acquisition | Energy charging | Change in passion |
|---------------------------------------|----------------------|------------------------|-------------------|-------------------|-----------------|-------------------|
| The same interest participation | .831 | .154 | -.042 | .055 | -.012 | -.021 |
| Participate with people | .765 | .019 | -.031 | .149 | -.081 | .015 |
| Participation in the same environment | .731 | .097 | -.011 | -.108 | .101 | -.109 |
| Participate in the same age group | .718 | -.005 | -.138 | .134 | .082 | -.011 |
| Cost savings | .141 | .868 | .017 | .002 | -.035 | .021 |
| Set the cost of activities | .016 | .845 | .013 | .051 | .135 | -.062 |
| Work hard | .145 | .812 | .065 | -.001 | .081 | .108 |
| Seeking the right job | .083 | .729 | -.072 | -.012 | .059 | .179 |
| Body, psychological control | -.104 | .021 | .917 | .080 | .085 | .124 |
| Relaxation of tension | .022 | -.013 | .904 | -.017 | .081 | .150 |
| Self-regulation | -.023 | .023 | .864 | .018 | .085 | .088 |
| Participate in lessons | -.018 | .004 | -.036 | .908 | .081 | .041 |
| Navigate instructor | .181 | .037 | .025 | .889 | .013 | .060 |
| Trying to learn skill | .109 | -.012 | .067 | .812 | .058 | -.101 |
| Reduce energy consumption | .133 | .107 | .051 | .067 | .860 | .160 |
| Take a break | -.012 | .039 | .054 | .036 | .798 | -.118 |
| Regain physical strength | .102 | .180 | .106 | .041 | .754 | .123 |
| Participate in moving | -.001 | .141 | .115 | -.017 | .076 | .899 |
| Instead of similar items | .019 | .008 | .232 | .010 | .121 | .864 |
| Non-crowded time | .102 | .070 | .118 | .004 | .082 | .858 |
| Eigenvalue | 3.327 | 2.818 | 2.553 | 2.481 | 2.221 | 1.926 |
| % of Variance | 15.371 | 13.514 | 12.186 | 11.816 | 10.108 | 9.731 |
| Cumulative % | 15.371 | 28.885 | 41.071 | 52.887 | 62.995 | 72.726 |
| Cronbach's α | .827 | .847 | .894 | .869 | .786 | .819 |

Table 4. Results of the validity test: recreation specialization

| | Past experience | Centrality-to-lifestyle | Financial investment |
|--|-----------------|-------------------------|----------------------|
| Water-based tourism is important to me | .896 | .187 | .094 |
| My water-based tourism skill level is high | .888 | .134 | .126 |
| I am developing water-based tourism technology | .805 | .378 | .048 |
| I invest a lot of time in water-based tourism | .047 | .834 | .080 |
| Water-based tourism takes up a lot of time in my leisure time | .370 | .775 | .022 |
| I see lots of books and videos about water-based tourism | .491 | .738 | .147 |
| I am investing a lot in purchasing water-based tourism equipment | .104 | -.036 | .798 |
| Investment for equipment replacement is worthwhile | .078 | -.031 | .781 |
| Eigenvalue | 2.637 | 2.075 | 1.999 |
| % of Variance | 29.297 | 23.055 | 22.217 |
| Cumulative % | 29.297 | 52.353 | 74.569 |
| Cronbach's α | .888 | .802 | .743 |

3.4 Data Process

The study was conducted over a period of four months, from May to August 2017. Water-based tourism participants were asked to answer questions through a self-administration method. Of 350 questionnaires, 11 were eliminated because of a lack of responses and/or inaccurate information. The remaining 339 questionnaires were used in the statistical analysis, which was conducted using SPSS version 21.0. The analysis method was as follows. First, to assess the validity of the study, an exploratory factor analysis was conducted. Second, for the general features of the study, a frequency analysis was carried out. Third, correlation analysis was conducted for factor correlation. Last, the relationships among leisure constraints, leisure constraints negotiation, and recreation specialization were analyzed through multiple regression analysis.

4. Results

4.1 Relationships among Leisure Constraints, Leisure Constraints Negotiation and Recreation Specialization for Water-Based Tourism Participants in Busan

To examine the relationships among leisure constraints leisure constraints negotiation and recreation specialization for water-based tourism participants in Busan, Pearson’s correlation was employed. It was found that most correlation coefficients for factors were .05, indicating significance (Nunnally, 1978). The correlation analysis results were presented in table 5.

Table 5. Results of correlation analysis: leisure constraints, leisure constraints negotiation, recreation specialization

| | | | | | | | | | | | | |
|----|----------|----------|----------|---------|---------|----------|----------|---------|---------|---------|---------|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | 1 | | | | | | | | | | | |
| 2 | .344*** | 1 | | | | | | | | | | |
| 3 | .273*** | .381*** | 1 | | | | | | | | | |
| 4 | .174** | .208*** | .227*** | 1 | | | | | | | | |
| 5 | .203*** | .315*** | .314*** | .182** | 1 | | | | | | | |
| 6 | .265*** | .289*** | .379*** | .174** | .322*** | 1 | | | | | | |
| 7 | -.267*** | -.215*** | -.315*** | -.045 | -.049 | -.211*** | 1 | | | | | |
| 8 | -.181** | -.161** | -.061 | .031 | .021 | -.014 | .319*** | 1 | | | | |
| 9 | -.127* | -.066 | -.163** | .136* | -.060 | -.212*** | -.467*** | .298*** | 1 | | | |
| 10 | .156** | .325*** | .311*** | .142* | .269*** | .313*** | -.357*** | -.028 | .289*** | 1 | | |
| 11 | .319*** | .312*** | .371*** | .231*** | .132* | .330*** | -.131* | -.126* | -.081 | .371*** | 1 | |
| 12 | .317*** | .417*** | .283*** | .195*** | .327*** | .387*** | -.243*** | -.127* | -.131* | .362*** | .441*** | 1 |

*p<.05, **p<.01, ***p<.001

1: companion, 2: cost/time 3, intensity 4: skill, 5: energy, 6: passion 7: intrapersonal, 8: interpersonal, 9: structural, 10: past experience, 11: centrality-to-lifestyle, 12: financial investment

4.2 Effect of Leisure Constraints on Leisure Constraints Negotiation

The result of analysis on effect of leisure constraints on leisure constraints negotiation is as follow. First, intrapersonal constraints ($\beta = -.265$) has negative effect on search for companion factor ($p < .001$). Second, intrapersonal constraints ($\beta = -.193$) has negative effect on cost and time management factor ($p < .001$). Third, intrapersonal constraints ($\beta = -.382$) has negative effect on intensity control factor ($p < .001$). Fourth, intrapersonal constraints ($\beta = -.210$) has negative effect on change in passion ($p < .01$). Fifth, interpersonal constraints ($\beta = .118$) has positive effect on intensity control factor ($p < .05$). Sixth, interpersonal constraints ($\beta = .148$) has positive effect on change in passion factor ($p < .05$). Seventh, structural constraints ($\beta = -.194$) has negative effect on change in passion factor ($p < .01$). These results are presented in Table 6.

Table 6. Results of effect of leisure constraints on leisure constraints negotiation

| | Companion | | Cost/Time | | Intensity | | Skill | | Energy | | Passion | |
|---|-----------------------|-----------|-----------------------|-----------|-----------------------|-----------|-----------------------|--------|-----------------------|--------|-----------------------|----------|
| | β | t | β | t | β | t | β | t | β | t | β | t |
| 1 | -.265 | -3.985*** | -.193 | -3.135*** | -.382 | -6.348*** | -.092 | -1.281 | -.058 | -1.035 | -.210 | -3.142** |
| 2 | -.058 | -1.048 | -.090 | -1.233 | .118 | 2.096* | .062 | .961 | .081 | 1.195 | .148 | 2.351* |
| 3 | -.021 | -.349 | .023 | .518 | -.091 | 1.854 | .005 | .078 | -.081 | -1.156 | -.194 | -3.165** |
| | F = 9.715*** | | F = 6.048*** | | F = 16.121*** | | F = .641 | | F = 1.154 | | F = 8.819*** | |
| | R ² = .086 | | R ² = .055 | | R ² = .128 | | R ² = .008 | | R ² = .012 | | R ² = .085 | |

*p<.05, **p<.01, ***p<.001

1: intrapersonal, 2: interpersonal, 3: structural

4.3 Effects of Leisure Constraints on Recreation Specialization

The result of analysis on effect of leisure constraint on recreation specialization is as follows. First, intrapersonal constraints ($\beta = -.356$) has negative effect on past experience factor ($p < .001$). Second, intrapersonal constraints ($\beta = -.411$) has negative effect on centrality-to-lifestyle factor ($p < .001$). Third, intrapersonal constraints ($\beta =$

-.417) has negative effect on financial investment factor ($p < .001$). Fourth, Structural constraints ($\beta = -.147$) has negative effect on centrality-to-lifestyle factor ($p < .01$). These results are presented in Table 7.

Table 7. Results of effect of leisure constraint on recreation specialization

| Variables | Past experience | | Centrality-to-lifestyle | | Financial investment | |
|---------------------------|-----------------------|-----------|-------------------------|-----------|-----------------------|-----------|
| | β | t | β | t | β | t |
| Intrapersonal constraints | -.356 | -4.186*** | -.411 | -7.518*** | -.417 | -7.186*** |
| Interpersonal constraints | .049 | .745 | -.016 | -.299 | -.043 | -.711 |
| Structural constraints | -.058 | -.781 | -.147 | -2.615** | -.048 | -1.018 |
| | F = 7.613*** | | F = 31.186*** | | F = 21.657*** | |
| | R ² = .076 | | R ² = .284 | | R ² = .166 | |

** $p < .01$, *** $p < .001$

4.4 Effects of Leisure Constraints Negotiation on recreation specialization

The result of analysis on effect of leisure constraints negotiation on recreation specialization is as follows. All the sub-factors of leisure constraints negotiation revealed a significant and positive effect on search for companion ($\beta = .180$, $\beta = .139$), cost and time management ($\beta = .189$, $\beta = .141$), change in passion ($\beta = .172$, $\beta = .238$), skill acquisition ($\beta = .095$), intensity control ($\beta = .249$, $\beta = .192$, $\beta = .159$), and energy charging ($\beta = .189$) of recreation specialization ($p < .001$, $p < .01$, $p < .05$). Table 8 summarizes results of effect of leisure constraints negotiation on recreation specialization.

Table 8. Results of effect of leisure constraints negotiation on recreation specialization

| Variables | Past experience | | Centrality-to-lifestyle | | Financial investment | |
|--------------------------|-----------------------|----------|-------------------------|---------|-----------------------|----------|
| | β | t | β | t | β | T |
| Search for companion | -.031 | -.581 | .180 | 3.290** | .139 | 2.781** |
| Cost and time management | .189 | 3.154** | .104 | 1.714 | .141 | 2.703** |
| Intensity control | .105 | 1.623 | .172 | 2.931** | .238 | 4.451*** |
| Skill acquisition | .047 | .890 | .065 | 1.218 | .095 | 2.045* |
| Energy charging | .249 | 4.278*** | .192 | 3.411** | .159 | 3.137** |
| Change in passion | .063 | 1.067 | .043 | .789 | .189 | 3.693*** |
| | F = 13.311*** | | F = 17.248*** | | F = 23.291*** | |
| | R ² = .211 | | R ² = .265 | | R ² = .393 | |

* $p < .05$, ** $p < .01$, *** $p < .001$

5. Discussion and Conclusion

Water-based tourism participants characteristically participate in activities with “professional” knowledge and skills as in the case of recreation specialization. Those who are deliberately engaged in water-based tourism activities also experience many leisure constraints; however, they are constantly involved in active leisure and leisure constraints negotiation efforts. Through this process, participants experience recreation specialization and gradually become professional participants. In this regard, this study attempted to analyze the relationships among water-based tourism participants’ leisure constraints, leisure constraints negotiation, and recreation specialization. Their leisure constraints showed a significant influence on leisure constraints negotiation and recreation specialization, and leisure constraints negotiation had a significant effect on recreation specialization. The following discussion is based on these results.

First, leisure constraints partially negatively affect leisure constraints negotiation. Hubbard and Mannell (2001) found that leisure constraints negotiations are positively associated with leisure constraints through the Constraint-Effect Model, a leisure constraints negotiation model (Loucks-Atkinson & Mannell, 2007). Lee and Scott (2009) suggested that leisure constraints positively influence leisure constraints negotiation. These prior studies contradict this study. This implies that inherent limitations associated with the individual’s psychological and physical characteristics negatively affect the search for the companion required for water-based tourism activities or the management of costs and time. In addition, participants’ intrapersonal constraints can be interpreted as decreasing the willingness to self-control the intensity of water-based tourism or to continue leisure activities.

Second, leisure constraints have a partially negative effect on recreation specialization. The results of the previous study (Carroll & Alexandris, 1997; Hubbard & Mannell, 2001; Loucks-Atkinson & Mannell, 2007) indirectly support the results that leisure constraints have a negative effect on leisure activities participation. Intrapersonal constraints among leisure constraints negatively affect all sub factors of recreation specialization. Inherent limitations arising from personality, psychological anxiety, and physical characteristics facilitate an individual's recreation specialization through leisure participation. In addition, water-based tourism participants' physical difficulties and psychological limitations can be deduced as being a decisive factor that impedes continued participation in water-based tourism activities.

Third, leisure constraints negotiation has a partially positive effect on recreation specialization. This study's results support those of previous research (Hubbard & Mannell, 2001; Loucks-Atkinson & Mannell, 2007; Son, Kerstetter & Mowen, 2008) in that they lead to the conclusion that leisure constraints negotiation has a positive effect on leisure activity participation. This shows that leisure participants experience recreation specialization by overcoming leisure constraints and continuing to participate in activities through efforts in leisure constraints negotiation. Consequently, participants who are actively involved in water-based tourism and who have clear intentions will continue to participate and develop toward recreation specialization.

Busan, which is a representative marine waterfront city in East Asia, is highly likely to develop a water-based tourism industry. If infrastructure, accompanied by sufficient personal effort for professional knowledge and skill acquisition or skill improvement, is constructed at the governmental level, it would contribute to the expansion of water-based tourism. In addition, water-based tourism will help in the development of the tourism industry because it is possible to link it with other forms of tourism. Water-based tourism participants attain recreation specialization through their professional knowledge and personal effort. Therefore participants can encourage active participation if they have the choice to act toward that end.

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